



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,448	07/18/2003	Tsutomu Ohishi	240473US2	1119
22850 7590 06/26/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER KAU, STEVEN Y				
ART UNIT		PAPER NUMBER		
2625				
NOTIFICATION DATE		DELIVERY MODE		
06/26/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdoCKET@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

### Office Action Summary

**Application No.**

10/621,448

**Applicant(s)**

OHISHI ET AL.

**Examiner**

STEVEN KAU

**Art Unit**

2625

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-11, 13 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-11, 13 and 15-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 0203 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/8/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment was received on 3/4/2009, and has been entered and made of record. Currently, claims 1, 2, 4-11 and 15-23 are pending for further examination in this Action.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on December 8, 2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Response to Remark/Arguments***

3. Applicant's arguments with respect to 1, 2, 4-11 and 15-23 have been fully considered and the reply to the Remarks/Arguments is in the following:

- Applicant's arguments, for Claim Rejections Under 35 U.S.C. § 101, "A person having ordinary skill in the art at the time of the invention would recognize that a computer readable medium is not a signal. For example, and not to be construed as limiting, a computer readable medium is a computer element such as a hard disk or a nonvolatile recording medium (such as a flash card). In any case, a computer readable medium is a structural entity, not "just [] a form of a signal carrying data to program a

processor," as asserted in the Office Action", Pages 8-9, Remarks, 3/4/2009, with respect to claims 13-22 have been fully considered and are persuasive. The examiner accepts the arguments presented in the Remarks because the applicant defines that "computer readable medium" used in the original specification is not a signal form, rather, it is a tangible/physical medium, i.e. hard disk, and a nonvolatile recording medium. The rejection of claims 13-22 under 35 U.S.C. § 101 has been withdrawn from the record.

- Applicant's arguments with respect to the rejection of claims 1, 2, 4-11 and 15-23 under 35 U.S.C. 103(a) have been fully considered but are moot in view of the new ground(s) of rejection due to the amendments.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-9, 11 and 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US 6,697,847) in view of Itoh et al (US 6,330,611).

Regarding claim 1.

lwata' 847 discloses an image forming apparatus (**Information Process System of Figs. 9 & 39, and block diagram arrangement of Information Process System is disclosed in col 14, lines 62-67**) that includes service modules (**information processing modules, col 2, lines 56-64, i.e. Agent 300, Figs. 5, 10, 11, 20,21 & 33, etc.**) for performing system side processes on image formation, wherein applications can be added to the image forming apparatus separately from the service modules (**i.e. by downloading software or an application from a computer of Fig. 2, col 25, lines 22-44**), the image forming apparatus comprising:

an application launch part (**i.e. the agent of the printer module includes Display Data Getting part and LAN Interface of Figs. 44 & 47**) configured to access launch selection information (**i.e. to input setup information for adding a hardware module, col 2, lines 56-61, col 13, lines 36 to col 14, line 16, & downloading software of a printer from a server, col 25, line 22 to col 26, line 26**), an auxiliary storage device that stores one or more applications (**i.e. setup information or a file to be downloaded, are stored in a network computer or a server, which is an auxiliary storage device relative to the printer, or the information process system in lwata's disclosure, Figs. 2 and 46, col 24, lines 41-46, and as discussed above for inputting or downloading setup information or file**), and configured to launch the one or more applications from the auxiliary storage device (**i.e. the agent of Figs 44 and 47 is configure to input or download setup information of a file from network computer or server, col 25, line 31 to col 26, line 26**); and wherein the service modules are stored in a memory distinct from the auxiliary storage device (**i.e. setup**

**information or a file to be downloaded, are stored in a network computer or a server, which is an auxiliary storage device relative to the printer, or the information process system in lwata's disclosure, Figs. 2 and 46, col 24, lines 41-46, and as discussed above for inputting or downloading setup information or file); and configured to store information input from the setting screen as the launch selection information (i.e. referring to Figs. 47 & 48, col 25, line 31 to col 26, line 11, the stored file is replaced with the input file).**

lwata does not disclose the launch selection information indicating at least a location of an auxiliary storage device that stores one or more applications; a part configured to display a setting screen that sets the launch selection information on a display part.

Itoh teaches the launch selection information indicating at least a location of an auxiliary storage device that stores one or more applications (referring to Figs. 13A, 13B and 13C, servers SUR1, SUR2 and Sur3, the auxiliary storage device, which has a screen providing such location for the file being stored, col 9, lines 8-28); a part configured to display a setting screen that sets the launch selection information on a display part (referring to Fig. 12, step-by-step of input screen configuration is disclosed, col 8, line 62 to col 9, line 7).

Having an image forming apparatus of lwata' 847 reference and then given the well-established teaching of Itoh' 611 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the image forming apparatus of lwata' 847 reference to include the launch selection information

indicating at least a location of an auxiliary storage device that stores one or more applications; a part configured to display a setting screen that sets the launch selection information on a display part as taught by Itoh' 611 reference. The motivation for doing so would have been to increase the versatility of the image forming apparatus for scheduling application update with automatic monitoring, and further the services provided could easily be established for one another with predictable results.

Regarding claim 4, in accordance with claim 1.

Iwata' 847 discloses wherein the application launch part (**Display Data Getting Part and LAN Interface of Figs. 44 & 47**) launches the application by referring to information on the application (**downloading a software must refer to a specific application, col 25, lines 22-50 and Steps of Fig. 28 & col 20, lines 25-36**).

Regarding Claim 5, in accordance with claim 4.

Iwata' 847 discloses wherein the information referred to by the application launch part is address information of the application (**e.g. managing addresses of modules, Fig. 28, col 20, lines 25-36**).

Regarding Claim 6, in accordance with claim 1.

Iwata' 847 discloses wherein the application launch part determines whether the application is installed at the location according to presence or absence of predetermined information on the application, and the application launch part launches the application if the application is installed at the location (**Iwata' 847 discloses steps of software downloading verification including addresses, whether is an error in downloading, and determining whether or not the requested display data**

**incorporating with printer state, etc. Figs. 3, 28 & 48, col 12, lines 44-53, col 20, lines 25-36 and col 25, lines 22-50).**

Regarding Claim 7, in accordance with claim 1.

Iwata' 847 discloses wherein the application launch part refers to setting information including information indicating whether a predetermined application is to be launched, and the application launch part launches the predetermined application if the setting information includes information indicating the predetermined application is to be launched (**e.g. display data getting part in getting display data is based on predetermined command, col 12, lines 9-18**).

Regarding Claim 8, in accordance with claim 1.

Iwata' 847 discloses wherein the application launch part refers to setting information including information indicating applications to be launched, and the application launch part launches the application indicated in the information (**e.g. display data getting part allow use to determine what data or application to be download, Figs. 8 & 48, col 25, line 22 to col 26, line 26**).

Regarding Claim 9, in accordance with claim 8.

Iwata' 847 discloses a part for displaying a setting screen for setting the setting information on a display part of the image forming apparatus (**Figs. 44 and 48 disclose display functions**), and storing information input from the setting screen as the setting information (**display data information is stored by storing means, col 12, lines 9-53**).

Regarding Claim 11.

Iwata' 847 discloses wherein the image forming apparatus receives an application from the computer connected to the image forming apparatus via a network by using an http protocol or an ftp protocol, and the application launch part launches the received application (**e.g. computer and printer are connected to the same network and they communicate each other through the network as shown in Figs. 2 & 48, and HTTP protocol is used, col 1, lines 40-44**).

Regarding Claim 22.

Claim 22 is directed to a computer readable medium claim which substantially corresponds to operation of the device in claim 1, with processing steps directly corresponding to the function of device elements in claim 1. Thus, claim 22 is rejected as set forth above for claim 1.

Regarding Claim 15, in accordance with claim 22.

Claim 4 recites identical features as claim 15, except claim 15 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 4 are also equally applicable to claim 15.

Regarding Claim 16, in accordance with claim 16.

Claim 5 recites identical features as claim 16, except claim 16 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 5 are also equally applicable to claim 16.

Regarding Claim 17, in accordance with claim 22.

Claim 6 recites identical features as claim 17, except claim 17 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 6 are also equally applicable to claim 17.

Regarding Claim 18, in accordance with claim 22.

Claim 7 recites identical features as claim 18, except claim 18 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 7 are also equally applicable to claim 18.

Regarding Claim 19, in accordance with claim 22.

Claim 8 recites identical features as claim 19, except claim 19 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 8 are also equally applicable to claim 19.

Regarding Claim 20, in accordance with claim 19.

Claim 9 recites identical features as claim 20, except claim 20 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 9 are also equally applicable to claim 20.

Regarding Claim 21, in accordance with claim 13.

Claim 11 recites identical features as claim 21, except claim 21 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 11 are also equally applicable to claim 21.

6. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US 6,697,847) in view of Itoh et al (US 6,330,611) as applied to claims 1 and 22 above, and further in view of Washino et al (US 5,537,157)

Regarding claim 2, in accordance with claim 1.

Iwata' 847 discloses wherein the auxiliary storage device is at least one of a hard disk device (**Hard Disk 38 of Fig. 40, col 23, lines 55-63 and col 24, lines 48-51**), and a computer connected to the image forming apparatus via a network (**e.g. a computer connected to a network which is also connected with a printer, col 12, lines 34-38 and Fig. 2**).

Iwata' 847 does not explicitly disclose a recording medium removable from the image forming apparatus without disassembling any other portion of the image forming apparatus.

Washino' 157 teaches a recording medium removable from the image forming apparatus without disassembling any other portion of the image forming apparatus (**with removable hard disk or disk drives with removable media does not require to disassembling any portion of the image forming apparatus, col 4, lines 44-53**).

Having an image forming apparatus of Iwata' 847 reference and then given the well-established teaching of Washino' 157 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the image forming apparatus of Iwata' 847 reference to include a recording medium removable from the image forming apparatus without disassembling any other portion of the image forming apparatus as taught by Washino' 157 reference since doing so would increase

the accessibility of updating software of the image forming apparatus without disassembling the apparatus and further the services provided could easily be established for one another with predictable results.

Regarding Claim 13, in accordance with claim 22.

Claim 2 recites identical features as claim 13, except claim 13 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 2 are also equally applicable to claim 13.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US 6,697,847) in view of Itoh et al (US 6,330,611) as applied to claim 1 above, and further in view of Kimura (US 6,226,097).

Regarding Claim 10, in accordance with claim 1.

Iwata' 847 does not disclose that the image forming apparatus further comprising a virtual application service that operates as a client process for the services modules and operates as a server process for the applications, wherein the virtual application service includes the application launch part.

Kimura' 097 discloses a print interrupt method, in that he teaches the image forming apparatus further comprising a virtual application service (**e.g. a virtual server/virtual print spooler/virtual print server provide virtual application services; Figures 1, 7 & 8 col 6, lines 4-13**) that operates as a client process for the services modules (**Figures 7 & 10, col 6, lines 1-13 & col 7, lines 13-38**) and operates as a server process for the applications, wherein the virtual application service includes

the application launch part (**e.g. execute various types of programs such as application; Figure 1, col 4, lines 15- 36).**

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the combination of Iwata' 847 and Itoh' 611 to include the image forming apparatus further comprising a virtual application service that operates as a client process for the services modules and operates as a server process for the applications, wherein the virtual application service includes the application launch part taught by Kimura' 097 because it is capable of continuing normal printing even if a user request interruption of data transmission and performs the next printing (**col 1, lines 43-46).**

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata (US 6,697,847) in view of Itoh et al (US 6,330,611) and further in view of Washino et al (US 5,537,157)

Regarding claim 23.

Iwata' 847 discloses an image forming apparatus (**Information Process System of Figs. 9 & 39, and block diagram arrangement of Information Process System is disclosed in col 14, lines 62-67**) that includes service modules (**e.g. Agent 300 of Fig. 20**) for performing system side processes on image formation, wherein applications can be added to the image forming apparatus separately from the service modules (**e.g. by downloading software or an application from a computer of Fig. 2, col 25, lines 22-44**), the image forming apparatus comprising: an application launch part (**Display Data Getting part and LAN Interface of Figs. 44 & 47**) configured to launch the one or

more applications from the auxiliary storage device () (e.g. **downloading software from a computer, col 25, line 22 to col 26, line 26**) wherein the service modules are stored in a memory distinct from the auxiliary storage device (e.g. **hard disk 38 of Fig. 40**) (**Iwata' 847 discloses an Agent, Agent 300, for handling software downloading, a control panel with a display for displaying information including data transmission and the Agent 300 is a software which stored inside Printer Module of Fig. 10, col 13, lines 14-60, and Figs. 5, 6 & 7 for the 1<sup>st</sup> embodiment and Figs. 20 & 21, col 18, line 43 to col 19, line 6 for the 4<sup>th</sup> embodiment**).

Iwata' 847 does not explicitly disclose the launch selection information indicating at least a location of an auxiliary storage device that stores one or more applications; a part configured to display a setting screen that sets the launch selection information on a display part; and the launch selection information indicating one or more applications and a recording medium removable from the image forming apparatus without disassembling any other portion of the image forming apparatus.

Itoh teaches the launch selection information indicating at least a location of an auxiliary storage device that stores one or more applications (**referring to Figs. 13A, 13B and 13C, servers SUR1, SUR2 and Sur3, the auxiliary storage device, which has a screen providing such location for the file being stored, col 9, lines 8-28**); a part configured to display a setting screen that sets the launch selection information on a display part (**referring to Fig. 12, step-by-step of input screen configuration is disclosed, col 8, line 62 to col 9, line 7**), and the launch selection

information indicating one or more applications (i.e. referring to Figs. 13A-13C, a **HTML application, col 9, lines 8-28**); and

Washino' 157 teaches a recording medium removable from the image forming apparatus without disassembling any other portion of the image forming apparatus **(with removable hard disk or disk drives with removable media does not require to disassembling any portion of the image forming apparatus, col 4, lines 44-53)**.

Having an image forming apparatus of Iwata' 847 reference and then given the well-established teaching of Itoh' 611 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the image forming apparatus of Iwata' 847 reference to include the launch selection information indicating at least a location of an auxiliary storage device that stores one or more applications; a part configured to display a setting screen that sets the launch selection information on a display part; and the launch selection information indicating one or more applications as taught by Itoh' 611 reference since doing so would increase the versatility of the image forming apparatus for automatic application updating; and then to have modified the combination of Iwata' 847 reference and Itoh' 611 reference to include a recording medium removable from the image forming apparatus without disassembling any other portion of the image forming apparatus as taught by Washino' 157 reference since doing so would increase the accessibility of updating software of the image forming apparatus without disassembling the apparatus, and further the services provided could easily be established for one another with predictable results.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Kau whose telephone number is 571-270-1120 and fax number is 571-270-2120. The examiner can normally be reached on Monday to Friday, from 8:30 am -5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Steven Kau/  
Examiner, Art Unit 2625  
June 15, 2009

/David K Moore/  
Supervisory Patent Examiner, Art Unit 2625